

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A rewritable optical data storage medium ~~(20)~~ for high-speed recording by ~~means of a~~ focused radiation beam ~~(10)~~, said medium comprising a substrate ~~(7)~~ carrying a stack ~~(2)~~ of layers, which wherein the stack comprises,  
comprises:

a substantially transparent first auxiliary layer I1 ~~(3)~~,

a substantially transparent second auxiliary layer I2 ~~(5)~~  
having a thickness  $d_{I2}$ , ~~and~~

a recording layer ~~(4)~~ of a phase-change material comprising a composition  $\text{Ge}_x\text{Sn}_y\text{Sb}_{1-x-y}$ , where  $0.05 < x < 0.30$  and  $0.15 < y < 0.30$ , which  
wherein the recording layer is interposed between the first  
auxiliary layer I1 and the second auxiliary layer I2, and

a third auxiliary layer I3 ~~(6)~~ with a thickness  $d_{I3}$  acting as a

~~heat sink and being present at a side of I2 opposite to the side of~~  
~~, wherein the second auxiliary layer I2 is interposed between the~~  
~~recording layer and the third auxiliary layer I3, characterized in~~  
~~that~~

~~wherein  $\lambda_{I2}/d_{I2} > 5 \times 10^8 \text{ W m}^{-2} \text{ K}^{-1}$ , in which formula where  $\lambda_{I2}$  is the~~  
~~a heat conduction coefficient of the material of the I2 layer~~  
~~second auxiliary layer I2.~~

2. (Currently Amended) ~~An~~ The optical data storage medium (20)  
as claimed in claim 1, wherein the second auxiliary layer I2 ~~mainly~~  
comprises  $(\text{ZnS})_{80}(\text{SiO}_2)_{20}$  and the thickness  $d_{I2} < 10 \text{ nm}$ .

3. (Currently Amended) ~~An~~ The optical data storage medium (20)  
as claimed in claim 1, wherein the second auxiliary layer I2  
comprises at least one selected from the group of  $\text{Ge}_3\text{N}_4$ ,  $\text{Si}_3\text{N}_4$ ,  
 $\text{Al}_2\text{O}_3$ ,  $\text{Hf}_x\text{N}_y$ , ITO ( $\text{In}_2\text{O}_3:\text{Sn}$ ) and  $\text{Ta}_2\text{O}_5$ .

4. (Currently Amended) ~~An~~ The optical data storage medium (20)  
as claimed in claim 1, wherein the recording layer (4) ~~has a~~

thickness  $d_p$  and  $d_s$  which is smaller than 15 nm.

5. (Currently Amended) ~~An~~ The optical data storage medium (20) as claimed in claim 1, wherein the recording layer additionally comprises at least one ~~selected from of~~ In, Ag or and Cu.

6. (Currently Amended) ~~An~~ The optical data storage medium (20) as claimed in claim 5, wherein the at least one In, Ag and Cu is present in a concentration up to 10 at-%.

7. (Currently Amended) ~~An~~ The optical data storage medium (20) as claimed in claim 1, wherein the third auxiliary layer I3 mainly comprises Ag.

8. (Currently Amended) ~~An~~ The optical data storage medium (20) as claimed in claim 7, wherein the thickness  $d_{I3}$  of the third auxiliary layer I3 is at least 150 nm.

9. (Currently Amended) ~~An~~ The optical data storage medium (20)

as claimed in claim 1, ~~wherein further comprising~~ a substantially transparent fourth auxiliary layer I4 ~~(8)~~ ~~is present between the~~ third auxiliary layer I3 ~~(6)~~ and the second auxiliary layer I2 ~~(5)~~ for screening the third auxiliary layer I3 from a chemical influence of the second auxiliary layer I2.

10. (Currently Amended) ~~An~~ The optical data storage medium as claimed in claim 9, wherein the fourth auxiliary layer I4 ~~(8)~~ comprises at least one of  $\text{Si}_3\text{N}_4$  ~~or~~ and  $\text{Ge}_3\text{N}_4$ .

11. (Currently Amended) ~~An~~ The optical data storage medium as claimed in claim 10, wherein the fourth auxiliary layer I4 has a thickness  $d_{I4} \leq 3$  nm.

Claim 12 (Canceled)